Appendix I

RRC Annual Narrative FY2016

RAILROAD COMMISSION OF TEXAS

OIL AND GAS DIVISION

October 13, 2016

MR. MIKE FRAZIER
GROUND WATER/UIC SECTION (6WQ-SG)
U. S. ENVIRONMENTAL PROTECTION AGENCY
1445 ROSS AVE
DALLAS TX 75202-2733

RE: FY 2016 UIC ANNUAL NARRATIVE

Dear Mr. Frazier,

Attached is the Railroad Commission's Annual Narrative Report for its Underground Injection Control activities during the state fiscal year 2016.

We will be glad to discuss any of the Annual Narrative items. Please call me at (512) 463-3011 or email david.hill@rrc.texas.gov if you have any questions.

Sincerely,

David Hill

David Hill, P.E., P.G.
Manager for Injection-Storage
Permits and Support

DH/sam

Attachments

ANNUAL NARRATIVE OF UIC ACTIVITIES FOR STATE FY 2016
RAILROAD COMMISSION OF TEXAS

The following is a description of the Railroad Commission's (Commission's) activities and accomplishments in administering the Underground Injection Control (UIC) Program for Class II injection wells, hydrocarbon storage wells, and Class III brine mining wells in the state Fiscal Year (FY) 2016.

At the end of FY2016, the Commission's inventory of UIC wells was 54,701. The Commission processed 55,724 annual reporting forms (Form H-10) for disposal/injection wells and 781 annual reporting forms (Form H-10H) for hydrocarbon storage and brine mining wells.

In FY2016, the Commission received and reviewed 19,500 reports for mechanical integrity pressure tests of disposal and injection wells. The Commission's district office inspectors witnessed 7,523 (39%) of a total of 19,500 mechanical integrity tests performed by operators on permitted UIC wells. The Commission inspected 14 wells to verify credible wellhead monitoring for those wells for which the operator seeks tubing-casing annulus credit (TCAM) in lieu of mechanical integrity testing.

In FY2016, in lieu of pressure tests, the operators of 132 injection and disposal wells performed and reported the results of radioactive tracer surveys or temperature surveys. Operators also performed mechanical integrity tests on 125 hydrocarbon storage wells and 48 brine-mining wells.

The Commission's district offices reported 24,621 routine inspections of injection, disposal, and storage wells in FY2016. The district offices continue to maintain a high level of activity in support of the UIC program.

In FY2016, the Commission implemented the Inspection, Compliance, and Enforcement (ICE) System. This system is both a web-based reporting system accessible via the internet and a stand-alone system that allows field inspectors to capture inspections on a Toughbook without the need to always be connected. The ICE application allows the Commission to provide the inspector with operator, lease, and well information on the Toughbook, which cuts down on research by the inspector while at the well and helps the inspector in determining compliance, resulting in a more efficient inspection process. It captures inspections on both the lease and well level. The application is equipped with library of Commission rules, including the UIC regulations, that allows the inspector to document the specific rule in violation. Additional features of the application include the ability to capture the inspectors' description of violations and attach photos and documents related to the inspection. The ICE application is a more efficient inspection system that provides move information to inspectors resulting in less research and assists with assessing compliance while maintaining the ability to be completely mobile.

In FY2016, the Commission received 1,507 applications for 1,962 disposal and injection wells and issued 1,444 permits for 1,878 wells. The Commission transmitted 134 applications to Docket Services for resolution through a hearing.

In FY2016, the Commission received 20 applications for 21 brine-mining wells, and issued eight (8) new permits for nine (9) wells and amended permits for seven (7) wells. The Commission received no new applications and seven (7) expansion applications for a total of 30 underground hydrocarbon storage wells, and issued seven (7) amended permits for 33 underground hydrocarbon storage wells. The Commission received three (3) new applications and no amended applications for salt cavern disposal wells in FY2016. Additionally, the Commission issued no new permits for caprock injection and amended one (1) caprock injection well permit.

The East Texas Field is the only area for which the operators have been granted an exception to the Area of Review (AoR) requirement of Statewide Rule 46. In FY2016, the Commission permitted eight (8) new and three (3) amended non-commercial injection wells in the East Texas Field.

Commercial disposal wells in East Texas Field are subject to the AoR requirement and special permit conditions that include open-hole logs to verify formation tops, cement bond logs to confirm formation isolation, and radioactive tracer surveys to ensure confinement. All logs and surveys are witnessed by district office staff. In FY2016, the Commission permitted no commercial disposal wells in the East Texas field.

The Commission imposes additional permitting criteria and conditions for disposal wells in the Fort Worth Basin. The Commission expanded the AoR for these wells to an area of ½-mile radius. In addition, permit applicants for commercial disposal wells or for lease disposal wells proposing to inject over 5000 barrels per day into formations above the Barnett Shale Formation in the Barnett Shale trend area are required to provide pressure influence information demonstrating that the injected fluids will be confined to the injection interval. In FY2016, the Commission received no applications for injection above the Ellenburger Formation. Permitted injection below the Barnett Shale Formation into the Ellenburger Formation, must be at least 250 feet below the top of the Ellenburger Formation, and is restricted to a maximum of 25,000 barrels per day. In FY2016, the Commission received one (1) new and two (2) amended permit applications for injection into the Ellenburger Formation.

The Commission imposes special conditions for bottomhole pressure (BHP) measurements for injection into portions of the Brown Dolomite in the Texas Panhandle region. These wells are also subject to annual mechanical integrity testing.

The Commission continues to study certain areas where formation pressures are elevated. The Commission continued its study of the effects of the increase in disposal well operations in the Rodessa formation in Harrison, Panola, and Shelby Counties of east Texas related to development of the Haynesville Shale. In 2016, the Commission received the results of bottomhole pressure tests from the operators of 30 wells. The majority of the wells in this area have submitted only initial test results. However, the Commission has received more than one BHP test from 31wells which show three (3) of the four (4) wells in the Pettit with bottomhole pressure remaining relatively constant and the bottomhole pressure in one (1) well slightly declining, 19 wells in the Rodessa with bottomhole pressure remaining relatively constant, and seven (7) of eight (8) wells in shallower horizons (eg. Goodland, Duck Creek) with slight increases in pressure. In FY2016, the

Commission issued ten (10) new permits, all with a special condition to measure bottomhole pressure. The Commission has received the results of the initial BHP test for one (1) of these wells, with nine (9) wells not yet drilled.

Effective November 2014, the Commission's Statewide Rules 9 and 46 were amended to require operators to provide information from the United States Geological Survey (USGS) regarding the locations of any historical seismic events within a circular area of 100 square miles centered around a proposed disposal well location. This requirement applies to all new disposal wells and similar amendment applications where pressure, volume, or interval changes are requested. The Commission has received 61 disposal well applications for which a historic seismic event has occurred within the area of interest. Of those applications, the Commission has issued ten (10) permits without special conditions and 31 permits with special conditions to mitigate risk of seismic activity. Of the remaining applications, 11 have been withdrawn by the applicant or returned by the Commission, two (2) applications have been transmitted to Docket Services for a hearing, and seven (7) applications are pending.

In FY2016, the Commission took a total of 7,829 enforcement actions against operators of disposal and injection wells. Of these actions, 1,859 were notices of violation for failure to timely file the annual reporting forms and 2,546 were notices of violation to conduct a pressure test within the time period required by the Commission. The Commission also sent violation notices for 50 operating violations, primarily for operating in an unauthorized zone. Operators brought most wells into compliance as directed by the violation notice letters, which precluded the need for further enforcement action. The Commission issued seal orders for 92 disposal and injection wells and severed pipeline connections on 963 leases due to delinquent annual reporting forms and failure to conduct the required pressure tests.

The Commission's Form H-10 online filing system has continued to increase the availability of information relating to injection and disposal volumes for public, as well as internal queries. This system also continues to increase the number of annual compliance reviews. In FY2016, the H-10 online system initiated the review of reports, and subsequent mailing of 831 notice of violation letters representing 2,269 violations for 1,573 wells. The Commission followed up on 50 seal/pipeline severance orders when operators failed to comply with the notice of violation.

In FY2016, the Commission's online system for filing and processing Completion Reports for Oil, Gas, and Injection wells (Forms W-2/G-1) tracked approximately 2,450 completion packets for injection/disposal wells, each of which Commission staff reviewed for compliance with the permit.

In FY 2016, the Commission issued 886 seal orders and pipeline severances for violations associated with the UIC program resulting in $664,500.00 lease reconnection fees.

In FY2016, the Commission signed 11 consent agreements and administrative orders for enforcement actions under Rule 46 (10 actions), Rule 9 (2 actions), and Rule 81 (1 action). Enforcement actions resulted in penalties of $54,710.00 for violations associated with the UIC program.

The Commission continues to improve the efficiency and effectiveness of its Class II program through the digitization of mechanical integrity test (MIT) reports (Form H-5). In FY2016, an EPA special grant allowed the Commission to hire a temporary employee to digitize the MIT results for calendar year 2013, except for wells in Commission districts 8A, 9 and 10. The Commission has completed scanning for calendar year 2014. For calendar year 2015, the first and fourth quarters have been scanned. For calendar year 2016, the Commission has completed digitization for the first four months, and resources were re-allocated to digitize MIT reports on a date forward basis beginning in August of 2016. With an EPA Special Grant award for FY2017, the Commission will continue the digitization of MIT files on a day forward basis.

In February of 2016, Commission staff attended the Ground Water Protection Council's (GWPC's) 2016 UIC Conference in Denver, Colorado, and the GWPC 2016 Annual Forum in Orlando, Florida. Commission staff also participated in the development of the IOGCC and GWPC States *First Potential Injection-Induced Seismicity Associated with Oil & Gas Development: A Primer on Technical and Regulatory Considerations Informing Risk Management and Mitigation*, which was published in late 2015.

The Railroad Commission continues to actively participate in activities concerning UIC and other ground water protection issues that involve activities external to the Commission, including the Texas Groundwater Protection Committee (TGPC), the Interstate Oil and Gas Compact Commission (IOGCC), and the GWPC. In April 2016, staff attended the Solution Mining Research Institute (SMRI) Spring Conference in Galveston, Texas. In May 2016, staff attended the organizing meeting for the States First initiative on underground gas storage in Denver, Colorado. States First is a collaborative effort between the Groundwater Protection Council (GWPC) and Interstate Oil & Gas Compact Commission (IOGCC). Staff is participating in the States First gas storage workgroup, which is developing a primer on gas storage to be available to state regulators for establishing and/or evaluating existing rules on underground gas storage. In July of 2016, staff attended the U.S. Department of Energy Workshop on Well Integrity for Natural Gas Storage in Depleted Reservoirs and Aquifers and PHMSA's Public Workshop on Underground Natural Gas Storage Safety.

Appendix II

RRC Forms 7520
FY2016

RAILROAD COMMISSION OF TEXAS

OIL AND GAS DIVISION

November 4, 2016

MR. OMAR MARTINEZ
SOURCE WATER PROTECTION (6WQ-SG)
U. S. ENVIRONMENTAL PROTECTION AGENCY
1445 ROSS AVENUE
DALLAS TX 75202-2733

Re: UIC Federal Reporting
4th Quarter Federal FY 2016

Dear Mr. Martinez,

The UIC Federal Reporting Forms for the Railroad Commission's UIC program for the fourth quarter of federal fiscal year 2016 are attached.

If you have any questions, please email Debra.Turner@rrc.texas.gov or call 512-463-6816.

Sincerely,

David Hill

David Hill, P.E., P.G.
Manager for Injection-Storage Permits

DH/djt

Attachments

Cc: Mr. Mike Frazier
Water Quality Protection Division
U. S. Environmental Protection Agency
1445 Ross Avenue (6WQ-SG)
Dallas TX 75202-2733

Please type or print all information. Please read instructions.

OMB No. 2040-0042 Form Expires 12/31/18

United States Environmental Protection Agency
Office of Ground Water and Drinking Water
Washington, DC 20460

UIC Federal Reporting System
Part I: Permit Review and Issuance/ Wells in Area of Review

(This information is solicited under the authority of the Safe Drinking Water Act)

I. Name and Address of Reporting Agency

United States Environmental Protection Agency
Railroad Commission of Texas
PO Box 12967
Austin TX 78711-2967

II. Date Prepared *(month, day, year)*: 11/04/2016

III. State Contact *(name, telephone no.)*: David Hill 512-463-3011

IV. Reporting Period *(month, year)*: From October 1, 2015 To 09/30/2016

Item					Class and Type of Injection Wells						
					I	II SWD 2D	II ER 2R	II HC 2H	III	IV	V
V. Permit Application	Number of Permit Applications Received					386	1080	9			
VI. Permit Determination	Permit Issued	A	Number of Individual Permits Issued (One Well)	New Wells		0351	0	25	13		
				Existing Wells		0	0	0	0		
		B	Number of area Permits* Issued (Multiple Wells) (*See Instructions on back)	New Well Field		10540	1054	0	0		
				Existing Well Field		0	0	0	0		
		C	Number of Wells in Area Permits (See B above)	New Wells		0	1511	0	0		
				Existing Wells		0	0	0	0		
	Permit Not Issued	D	Number of Permits Denied/Withdrawn (after complete technical review)			84	96	0	4		
	Modification Issued	E	Number of Major Permit Modifications Approved			**	887	21	7		
VII. Permit File Review	Number of Rule-Authorized Class II Wells Reviewed			Wells Reviewed		**	0	0	0		
				Wells Deficient		NA	NA	NA	NA		
VIII. Area of Review (AOR)	Wells Reviewed	A	Number of Wells in Area of Review	Abandoned Wells		**	**	**	**		
				Other Wells		**	6864	0	0		
	Wells Identified for C/A	B	Number of Wells Identified for Corrective Action	Abandoned Wells		**	0	0	0		
				Other Wells		**	136	0	0		
	Wells with C/A	C	1. Number of Wells in AOR with Casing Repaired/Recemented C/A			0	0	0	0		
			2. Number of Active Wells in AOR Plugged/Abandoned			0	0	0	0		
			3. Number of Abandoned Wells in AOR Replugged			0	0	0	0		
			4. Number of Wells in AOR with "Other" Corrective Action			-------	136	0	0		

IX. Remarks/Ad Hoc Report *(Attach additional sheets if necessary)*

**=included with other wells; NA=deficiencies are noted on Part II, V. A. RRC does not authorize by Rule; individual permits are required.

Certification

I certify that the statements I have made on this form and all attachments thereto are true, accurate, and complete. I acknowledge that any knowingly false or misleading statement may be punishable by fine or imprisonment or both under applicable law.

Signature and Typed or Printed Name and Title of Person Completing Form	Date	Telephone No.
David Hill David Hill	11/04/2016	(512) 463-3011

Instructions and Definitions

All reporting is cumulative over the fiscal year, and includes activities from October 1 – September 30. All fields should contain a value. Do not leave blank fields. Enter 0 if there are no wells affected or no activities that occurred pertaining to the information requested. Enter NA if the field or section is not applicable to the submitter (e.g., the well type is not overseen by the submitter). Enter U if the information is unknown or not captured; fields designated as U require explanation.

Section V. Permit Application

Enter, under each well class, the total number of permit applications that have been received this year to date. Include all applications, including incomplete applications, for individual and area permits. Include all applications regardless of whether they are for "New Wells" or "Existing Wells."

A "New Well" is any well that began operation after the effective date of the State (or EPA) Underground Injection Control Program.

An "Existing Well" is any injection well that was in existence on the effective date of the State (or EPA) UIC Program.

A "New Well Field" has only "New Wells" or a combination of "New Wells" and "Existing Wells." An "Existing Well Field" contains only "Existing Wells."

Section VI. Permit Determination

Permit Determinations include the approval, withdrawal, or denial of UIC permit requests/actions such as: applications for permits, major modifications to issued permits, revocation and reissuance of permits, or termination of permits for cause. A complete permit determination includes a thorough technical evaluation of the request, public notification or review before issuance, and a final decision document signed by the regulating authority.

Item A: For each well class, enter the number of individual permits issued for "New or Existing Wells" this federal fiscal year to date.

Item B: For each well class, enter the number of area permits that have been issued for "New or Existing Well Fields" this year to date.

Item C: For each well class, enter the number of "New and Existing Wells" covered by the Area Permits entered in Item B.

Item D: For each well class, enter the number of permits or major modifications denied by the UIC primacy program and/or permits withdrawn by applicants this federal fiscal year to date. The denial of a permit or major modification should be included as a permit determination only after there has been a complete technical review.

Item E: For each well class, enter the number of major modifications approved this federal fiscal year to date. An approved major modification requires a complete technical review, public notification or review, and a final decision document signed by the regulating authority.

Section VII. Permit File Review

A complete technical review of a rule authorized Class II well record may be conducted to determine whether the well is in compliance with UIC regulatory requirements in lieu of a permit determination. The well record (or file) review may include an evaluation of siting reports, wells in the area of review, construction, operating, monitoring or other reports. These Class II wells should be routinely reviewed at least once every five years during the life of the well.

Wells Reviewed: For rule authorized (existing) Class II wells only, enter the number of wells with permit files reviewed and compliance status determined this federal fiscal year to date.

Wells Deficient: For rule authorized Class II wells, enter the number of reviewed wells that were found deficient (not in compliance with UIC regulations) and that received corrective action.

Section VIII. Area of Review (AoR)

All wells that penetrate the injection zone in the AoR of an injection well/field are reviewed during permit determination or during any AoR analysis of a rule authorized well file.

Item A: For each well class, enter the number of "Abandoned" and "Other" wells reviewed in the AoR for each permit application or file that has been reviewed this federal fiscal year to date.

"Abandoned" includes any well penetrating the injection zone in the AoR that has been properly or improperly plugged and/or abandoned.

"Other" includes any producing well, operable injection well, dry hole, exploratory well, etc., that penetrates the injection zone in the AoR.

Corrective Action is required for those wells that penetrate the injection zone in the AoR that are improperly sealed, completed, or abandoned.

Item B: For each well class, enter the number of "Abandoned" and "Other" wells in the AoR that have required corrective action for each permit application or file reviewed this federal fiscal year to date.

Item C: For each well class, enter the number of wells in the AoR which have received corrective action (be specific) for all permit applications or files that have been reviewed this year to date.

Please type or print all information. Please read instructions on reverse. OMB No. 2040-0042 Approval Expires 12/31/2018

United States Environmental Protection Agency
Office of Ground Water and Drinking Water
Washington, DC 20460

EPA

UIC Federal Reporting System
Part II: Compliance Evaluation

(This information is solicited under the authority of the Safe Drinking Water Act)

I. Name and Address of Reporting Agency

United States Environmental Protection Agency

Railroad Commission Of Texas
PO Box 12967
Austin TX 78711-2967

II. Date Prepared *(month, day, year)*	III. State Contact *(name, telephone no.)*	IV. Reporting Period *(month, year)*	
		From	To
11/04/2016	David Hill 512-463-3011	October 1, 2015	September 30, 2016

Item				Class and Type of Injection Wells						
				I	II SWD 2D	II ER 2R	II HC 2H	III	IV	V
V. Summary of Violations	Total Wells	A	Number of Wells with Violations		--------	8669	54	0		
	Total Violations	B	1. Number of Unauthorized Injection Violations		--	8	0	0		
			2. Number of Mechanical Integrity Violations		--	2547	0	0		
			3. Number of Operation and Maintenance Violations		--	562	0	0		
			4. Number of Plugging and Abandonment Violations		--	0	0	0		
			5. Number of Monitoring and Reporting Violations		--	5234	54	0		
			6. Number of Other Violations *(Specify)* completion violations		--	318	0	0		
VI. Summary of Enforcement	Total Wells	A	Number of Wells with Enforcement Actions		4	4922	14	0		
	Total Enforcement Actions	B	1. Number of Notices of Violation		--	3581	14	0		
			2. Number of Consent Agreements		2	9	0	0		
			3. Number of Administrative Orders		1	13	0	0		
			4. Number of Civil Referrals		1	8	0	0		
			5. Number of Criminal Referrals		0	0	0	0		
			6. Number of Well Shut-ins		--	96	0	0		
			7. Number of Pipeline Severances		--	1041	0	0		
			8. Number of Other Enforcement Actions *(Specify)* permits suspended/cancelled		--	174	0	0		
VII. Summary of Compliance	Number of Wells Returned to Compliance		A. This Quarter		--------	2734	--------	--------		
			B. This Year		--------	12648	--------	--------		
VIII. Contamination	Number of Cases of Alleged Contamination of a USDW				--------	0	--------	--------		
IX. MIT Resolved	Percent of MIT Violations Resolved in 90 Days				100	100	100	100		

X. Remarks/Ad Hoc Report *(Attach additional sheets)* some wells have multiple violations

Certification

I certify that the statements I have made on this form and all attachments thereto are true, accurate, and complete. I acknowledge that any knowingly false or misleading statement may be punishable by fine or imprisonment or both under applicable law.

Signature and Typed or Printed Name and Title of Person Completing Form	Date	Telephone No.
David Hill David Hill	11/04/2016	(512) 463-3011

EPA Form 7520-2A (12-31-15) Replaces EPA Form 7520-2 which is obsolete

Definitions and Instructions

All reporting is cumulative over the fiscal year, and includes activities from October 1 – September 30. All fields should contain a value. Do not leave blank fields. Enter 0 if there are no wells affected or no activities that occurred pertaining to the information requested. Enter NA if the field or section is not applicable to the submitter (e.g., the well type is not overseen by the submitter). Enter U if the information is unknown or not captured; fields designated as U require explanation.

A Class I, II, III, IV, or V injection well with a violation of a permit or rule requirement is said to be in noncompliance. Note: A well with certain types of violations may also be in significant noncompliance. (See Form 7520-2B (reverse) for definitions of SNC violations.)

Section V. Summary of Violations

(Includes all noncompliance; significant and non-significant)

A. Total Wells: For each well class, enter the number of wells with one or more violations in this federal fiscal year to date. Enter each well only once. Include all wells with violations, even those with violations that have been returned to compliance.

B. Total Violations:

Items 1-6: For each well class, enter the number of times each violation type has been identified this federal fiscal year to date.

Section VI. Summary of Enforcement

A. Total Wells: For each well class, enter the number of wells with one or more violations that have been addressed by the specific type of enforcement action in this federal fiscal year to date. Enter each well only once.

B. Total Enforcement Actions:

Items 1-8: For each well class, enter the number of times wells with one or more violations have been addressed by the specific type of enforcement action indicated in the row, in this federal fiscal year to date. (Count each draft and final Administrative Order.)

Section VII. Number of Wells Returned to Compliance

A "Well Returned to Compliance" is a well that has all underlying violations resolved and compliance has been verified by the primacy program. Note: An enforcement action alone (e.g., well shut-in) does not constitute a "return to compliance;" however, plugging and abandonment does constitute a return to compliance.

A. For each well class, enter the number of wells returned to compliance through the second quarter for midyear reporting and through the fourth quarter for end of the year reporting.

B. For each well class, enter the number of wells returned to compliance through the second quarter for midyear reporting and through the fourth quarter for end of the end of year reporting.

Section VIII. USDW Contaminations

For each well class, enter the number of times a well in noncompliance has allegedly contaminated an underground source of drinking water (USDW) this federal fiscal year to date.

Section IX. Percent of MIT Violations Resolved in 90 Days

For each well class, enter the percentage of MIT violations resolved within 90 days as of the end of the reporting period.

- Mechanical Integrity violations are as defined in Section V, under "Mechanical Integrity."
- Resolved is defined as returned to compliance (per Section VII).
- MI violations not associated with loss of mechanical integrity (such as reporting) are not counted under this section.
- Violations occurring WITHIN 90 days of September 30 should be included in reporting for the following federal fiscal year.

To calculate the percentage:

- Add up the total number of MIT violations that occurred within a one year period prior to 90 days before the end of the fiscal year reporting cycle i.e., 6/30.
- Add up the number of these violations that were *resolved within 90 days* as of 3/31(for midyear reporting) or as of 9/30 (for end of year reporting).
- Calculate the percentage of total MIT violations that were resolved in 90 days or less.

Example for Midyear reporting:

- Number of violations that occurred from 7/1 – 3/31 = 8
- Number of these violations resolved within 90 days as of 3/31 = 2
- Percentage of MIT violation resolved within 90 days = 25%

Example for End of Year reporting:

- Number of MIT violations that occurred from 7/1 – 6/30 = 10
  - 8 from midyear plus 2 additional (4/1 to 6/30)
- Number of these violations resolved within 90 days as of 9/30 = 5
  - 2 (from midyear) + 3 (from 4/1 to 6/30)
- Percentage of MIT resolved within 90 days by 9/30 = 50%

Please type or print all information. Please read instructions on reverse. OMB No. 2040-0042 Approval Expires 12/31/18

United States Environmental Protection Agency
Office of Ground Water and Drinking Water
Washington, DC 20460

EPA

UIC Federal Reporting System
Part II: Compliance Evaluation
Significant Noncompliance

(This information is solicited under the authority of the Safe Drinking Water Act)

I. Name and Address of Reporting Agency

United States Environmental Protection Agency
Railroad Commission of Texas
PO Box 12967
Austun TX 78711-2967

II. Date Prepared *(month, day, year)*: 11/04/2016

III. State Contact *(name, telephone no.)*: David Hill 512-463-3011

IV. Reporting Period *(month, year)*: From October 1, 2015 To 09/30/2016

Item				Class and Type of Injection Wells						
				I	II SWD 2D	II ER 2R	II HC 2H	III	IV	V
V. Summary of Significant Non-Compliance (SNC)	Total Wells	A	Number of Wells with SNC Violations		0	1982	0	0		
	Total Violations	B	1. Number of Unauthorized Injection SNC Violations		--	8	0	0		
			2. Number of Mechanical Integrity SNC Violations		--	1896	0	0		
			3. Number of Injection Pressure SNC Violations		--	76	0	0		
			4. Number of Plugging and Abandonment SNC Violations		--	0	0	0		
			5. Number of SNC Violations of Formal Orders		0	0	0	0		
			6. Number of Falsification SNC Violations		--	2	0	0		
			7. Number of Other SNC Violations *(Specify)*		--	0	0	0		
VI. Summary of Enforcement Against SNC	Total Wells	A	Number of Wells with Enforcement Actions Against SNC		1	2305	0	0		
	Total Enforcement Actions	B	1. Number of Notices of Violation		--	1611	0	0		
			2. Number of Consent Agreements/Orders		1	5	0	0		
			3. Number of Administrative Orders		0	11	0	0		
			4. Number of Civil Referrals		0	7	0	0		
			5. Number of Criminal Referrals		0	0	0	0		
			6. Number of Well Shut-ins		--	45	0	0		
			7. Number of Pipeline Severances		--	626	0	0		
			8. Number of Other Enforcement Actions Against SNC Violations *(Specify)*		--	0	0	0		
VII. Summary of Compliance	Number of Wells in SNC Returned to Compliance		A. This Quarter		--------	1192	--------	--------		
			B. This Year		--------	4846	--------	--------		
VIII. Contamination	Number of Cases of Alleged Contamination of a USDW				--------	0	--------	--------		
IX. Well Closure	Class IV/Endangering Class V Well Closures		Involuntary Well Closure							
			Voluntary Well Closure							

Certification

I certify that the statements I have made on this form and all attachments thereto are true, accurate, and complete. I acknowledge that any knowingly false or misleading statement may be punishable by fine or imprisonment or both under applicable law.

Signature and Typed or Printed Name and Title of Person Completing Form	Date	Telephone No.
David Hill David Hill	11/04/2016	(512) 463-3011

EPA Form 7520-2B (Rev. 12-1-15) Replaces EPA Form 7520-2 which is obsolete.

Instructions and Definitions

All reporting is cumulative over the fiscal year, and includes activities from October 1 – September 30. All fields should contain a value. Do not leave blank fields. Enter 0 if there are no wells affected or no activities that occurred pertaining to the information requested. Enter NA if the field or section is not applicable to the submitter (e.g., the well type is not overseen by the submitter). Enter U if the information is unknown or not captured; fields designated as U require explanation.

Note: Significant Noncompliance violations are a subset of the violations reported on EPA Form 7520-2A.

Definitions of SNC Violations: SNC violations are violations that endanger or pose a significant potential to endanger underground sources of drinking water (USDWs), and violations that are not addressed after enforcement actions. For example:

1. The following violations for a Class I well:
   - Contamination of a USDW;
   - Injection of unauthorized fluid(s);
   - Injection into unauthorized zones;
   - Failure to cease injection after loss of MI detected; Failure to comply with corrective action requirements;
   - Failure to operate automatic shutdown system;
   - Failure to operate automatic warning system;
   - Unauthorized plugging and abandonment;
   - Violation of a Formal Order;
   - Knowing submission of false information;
   - Violations involving loss of mechanical integrity;
   - Violations of maximum injection pressure;
   - Failure to install and/or operate injection pressure and annulus pressure monitoring systems or other monitoring systems, required by permit or rule; and
   - Failure to maintain required annulus pressure.

Also, any Class I well with a non-SNC violation that is noted three times within twelve months of the first violation is considered to be in SNC. List these Class I specific violations under Other SNC Violations unless they clearly fall within the categories of violations in the list below.

2. The following violations for a Class II, III, or V well:
   - Unauthorized Injection – Any unauthorized emplacement of fluids (where formal authorization is required);
   - Mechanical Integrity – Well operation without mechanical integrity which causes the movement of fluid outside the authorized zone – if injection of such fluid may have the potential for endangering a USDW;
   - Injection Pressure – Well operation at an injection pressure that exceeds the permitted or authorized injection pressure and causes the movement of fluid outside the authorized zone of injection – if such movement may have the potential for endangering a USDW;
   - Plugging and Abandonment – The plugging and abandonment of an injection well in an unauthorized manner. These wells are in SNC only when there is endangerment of USDW and there is an identifiable owner/operator;
   - Violation of a Formal Order – Any violation of a formal enforcement action, including an administrative or judicial order, consent agreement, judgment, or equivalent action;
   - Falsification – The knowing submission or use of any false information in a permit application, periodic report or special request for information about a well; or
   - Other SNC Violations.

3. Any violation for a Class IV well.

Section V. Total No. of Wells with SNC Violations: *Significant Noncompliance violations are a subset of the violations reported on EPA From 7520-2A.* For each well class, enter the number wells with SNC violations identified in the federal fiscal year to date. Report the well even if the violation has been corrected. *Count each well only once.*

For each well class in subsections 1 through 7, enter the number the number of times each SNC violation has been identified this federal fiscal year to date.

Section VI. Total SNC Enforcement Actions: *Significant Noncompliance violations are a subset of the violations reported on EPA Form 7520-2A.* For each well class, enter the number of wells with SNC violations that have received an enforcement action(s) this year to date. Report the well even if the violation has been corrected. *Count each well only once.*

For each well class in subsections 1 through 8, enter the number of times wells with SNC violations have received each type of enforcement action this federal fiscal year to date.

Section VII. No. of Wells Returned to Compliance: *"Well Returned to Compliance" is a well that has all underlying violations resolved and compliance has been verified by the primacy program. Note: an enforcement action alone (e.g., well shut-in) does not constitute a "return to compliance;" however, plugging and abandonment does constitute a return to compliance.*
For each well class in subsection A, enter the number of wells returned to compliance (as a result of an enforcement action against a SNC violation). For each well class in subsection B, enter the number of wells returned to compliance (as a result of an enforcement action against an SNC violation) this federal fiscal year to date. *Enter each well only once.*

Section VIII. USDW Contaminations: For each well class, enter the number of times a well in SNC has allegedly contaminated a USDW this federal fiscal year to date.

Section IX. Number of Class IV/V Endangering Class V Well Closures: For Class IV and Class V wells, enter the number of voluntary or involuntary well closures.

Voluntary well closure means well closed as a direct result of outreach activities.

Involuntary well closure means wells closed as a result of enforcement actions or permit call-ins.

Well closure describes a process to permanently discontinue injection in accordance with the UIC regulations.

Please type or print all information. Please read instructions on reverse. OMB No. 2040-0042 Approval Expires 12/31/18

United States Environmental Protection Agency
Office of Ground Water and Drinking Water
Washington, DC 20460

EPA

UIC Federal Reporting System
Part III: Inspections
Mechanical Integrity Testing

(This information is solicited under the authority of the Safe Drinking Water Act)

I. Name and Address of Reporting Agency

United States Environmental Protection Agency

Railroad Commission of Texas
PO Box 12967
Austin TX 78711-2967

II. Date Prepared *(month, day, year)*: 11/04/2016

III. State Contact *(name, telephone no.)*: David Hill 512-463-3011

IV. Reporting Period *(month, year)*: From October 1, 2015 To 09/30/2016

Item				Class and Type of Injection Wells						
				I	II SWD 2D	II ER 2R	II HC 2H	III	IV	V
V. Summary of Inspections	Total Wells	A	Number of Wells Inspected		--	30163	136	53		
	Total Inspections	B	1. Number of Mechanical Integrity Tests (MIT) Witnessed		--	5834	136	53		
			2. Number of Emergency Response or Complaint Response Inspections		--	348*	--	--		
			3. Number of Well Constructions Witnessed		**	**	**	**		
			4. Number of Well Pluggings Witnessed		**	**	**	**		
			5. Number of Routine/Periodic Inspections		--	23981	--	--		
VI. Summary of Mechanical Integrity (MI)	Total Wells	A	Number of Wells Tested or Evaluated for Mechanical Integrity (MI)		--	21352	1032	119		
		B	No. of Rule-Authorized Wells Tested/Evaluated for MI — Passed 2-part test		NA	NA	NA	NA		
			Failed 2-part test		NA	NA	NA	NA		
	For Significant Leak	C	1. Number of Annulus Pressure Monitoring Record Evaluations — Well Passed		**	**	0	0		
			Well Failed		**	**	0	0		
			2. No. of Casing/Tubing Pressure Tests — Well Passed		--	17332	0	53		
			Well Failed		--	940	0	0		
			3. Number of Monitoring Record Evaluations — Well Passed		--	0	760	33		
			Well Failed		--	0	0	0		
			4. No. of Other Significant Leak Tests/Evaluations *(Specify)* — Well Passed		--	0	136	0		
			Well Failed		--	0	0	0		
	For Fluid Migration	D	1. Number of Cement Record Evaluations — Well Passed		--	2973	--	--		
			Well Failed		0	0	0	0		
			2. Number of Temperature/Noise Log Tests — Well Passed		--	39	0	0		
			Well Failed		--	0	0	0		
			3. No. of Radioactive Tracer/Cement Bond Tests — Well Passed		--	68	0	0		
			Well Failed		--	0	0	0		
			4. No. of Other Fluid Migration Tests/Evaluations *(Specify)* — Well Passed		--	0	136	33		
			Well Failed		--	0	0	0		
VII. Summary of Remedial Action	Total Wells	A	Number of Wells with Remedial Action		--	***	0	0		
	Total Remedial Actions	B	1. Number of Casing Repaired/Squeeze Cement Remedial Actions		--	***	0	0		
			2. Number of Tubing/Packer Remedial Actions		--	***	0	0		
			3. Number of Plugging/Abandonment Remedial Actions		--	***	0	0		
			4. Number of Other Remedial Actions *(Specify)*		--	***	0	0		

VIII. Remarks/Ad Hoc Report *(Attach additional sheets)* *from daily inspector roport; **NA for UIC wells only, total for all well types; *** Data not captured

Certification

I certify that the statements I have made on this form and all attachments thereto are true, accurate, and complete. I acknowledge that any knowingly false or misleading statement may be punishable by fine or imprisonment or both under applicable law.

Signature and Typed or Printed Name and Title of Person Completing Form: David Hill David Hill

Date: 11/04/2016

Telephone No.: (512) 463-3011

EPA Form 7520-3 (Rev. 12-31-15) Previous edition is obsolete.

Instructions and Definitions

All reporting is cumulative over the fiscal year, and includes activities from October 1 – September 30. All fields should contain a value. Do not leave blank fields. Enter 0 if there are no wells affected or no activities that occurred pertaining to the information requested. Enter NA if the field or section is not applicable to the submitter (e.g., the well type is not overseen by the submitter). Enter U if the information is unknown or not captured; fields designated as U require explanation.

Section V. Summary of Inspections

A complete inspection should include an assessment of: the well head, pressure and flow meters, pipeline connections, and any other equipment associated with the injection system. An inspection is complete only when a report has been filed with the primacy agency.

Item A: For each well class, enter the number of wells that have been inspected as of the end of the reporting period. Enter each well only once.

Total Inspections (this federal fiscal year to date):

Item 1: For each well class, enter the number of inspections to witness field Mechanical Integrity Tests. (At least 25% of MITs performed by operators each year should be witnessed.)

Item 2: For each well class, enter the number of inspections that have been in response to a problem reported to the regulating authority.

Item 3: For each well class, enter the number of inspections of well constructions or any preoperational activities.

Item 4: For each well class, enter the number of inspections of plugging and abandonment.

Item 5: For each well class, enter the number of inspections that have been routine / periodic.

Section VI. Summary of Mechanical Integrity

A complete MIT is composed of a test for significant leaks in the casing, tubing or packer and a test for significant fluid migration into a USDW through vertical channels adjacent to the well bore. An MIT consists of a field test on a well or an evaluation of a well's monitoring records (i.e., annulus pressure, etc.) or cement records. At a minimum, the mechanical integrity of a Class I, II, or III (solution mining of salt) well should be demonstrated at least once every five years during the life of the well.

Item A: For each well class, enter the total number of wells (i.e., permitted *and* rule authorized) that have had a complete MIT this federal fiscal year to date. Enter each well only once.

Item B: For each well class, enter the number of rule authorized wells that have passed a complete MIT and the number that have failed a complete MIT this federal fiscal year to date.

Item C: Significant Leak Tests: (this federal fiscal year to date)

Items 1-4: For each well class, enter the number of times wells have passed or failed a field test/record evaluation for significant leaks.

Item D: Fluid Migration Tests (this federal fiscal year to date):

Items 1-4: For each well class, enter the number of times wells have passed or failed a field test/record evaluation for fluid migration.

Section VII. Summary of Remedial Action

A failure of mechanical integrity (MI) may occur at any time during the life of an injection well. Failure may be identified during an inspection, a field test, an evaluation of well records, or during routine operation of a well. Remedial actions include additional permit conditions, monitoring, or testing.

Item A: For each well class, enter the number of wells that have received remedial actions this federal fiscal year to date. Enter each well only once.

Total Remedial Actions: (this federal fiscal year to date):

Item 1-4: For each well class, enter the number of times that wells have received remedial action.

United States Environmental Protection Agency
Office of Ground Water and Drinking Water
Washington, DC 20460

EPA

UIC Federal Reporting System
Part IV: Quarterly Exceptions List

(This information is collected under the authority of the Safe Drinking Water Act)

OMB No. 2040-0042
Approval expires 12/31/18

I. Reporting Period

From: 10/01/2015 To: 09/30/2016

II. Well Class and Type	III. Name and Address of Owner/Operator	IV. Well ID No. (Permit No.)	V. Summary of Violations								VI. Summary of Enforcement									VII. Date Compliance Achieved
			Date of Violation	Mark ('X') Violation Type							Date of Enforcement	Mark ('X') Enforcement Type								
				Unauthorized Injection	Well Mechanical Integrity	Injection Pressure	Plugging and Abandonment	Formal Order	Falsification	Other (Specify)		Notice of Violation	Consent Agreement	Administrative Order	Civil Referral	Criminal Referral	Well Shut-in	Pipeline Severance	Other (Specify)	
	NONE																			

Certification

I certify that the statements I have made on this form and all attachments thereto are true, accurate, and complete. I acknowledge that any knowingly false or misleading statement may be punishable by fine or imprisonment or both under applicable law.

Signature of Person Completing Form	Typed or Printed Name and Title	Date	Telephone No.
David Hill	David Hill, Manager, Injection-Storage Permits	11/04/2016	(512) 463-3011

Instructions and Definitions

The Quarterly Exceptions list is used to track wells reported in significant noncompliance (SNC) on EPA Form 7520-2B for two or more consecutive quarters without being addressed with a formal enforcement action or being returned to compliance. Any SNC reported on Form 7520-4 shall be reported until the well in SNC is returned to compliance. The well is removed from the exceptions list in the subsequent reporting period.

Do not leave the form blank. If there are no exceptions, indicate none.

Section I - Reporting Period

All reporting is cumulative over the federal fiscal year, and includes activities from October 1- March 31 (for midyear reporting) and from October 1- September 30 (for end of year reporting).

Section II - Well Class and Type

Enter the well class and type of each well in SNC for two or more consecutive quarters. For Class I wells, specify IH for hazardous waste, IM of municipal waste, Ii for industrial waste. For Class II wells, specify IID for saltwater disposal, IIR for enhanced recovery, IIH for liquid hydrocarbon storage.

Section III - Name and Address of Owner/Operator

Enter the name and address of the primary contact for the injection well. Use multiple lines of the form if needed. (You may use one form for each owner/operator.)

Section IV - Well ID No. (Permit No.)

Enter the primacy agency-assigned I.D. number of the injection well in SNC. If the well has a UIC permit number, enter this as the I.D. number.

Section V - Summary of Violations

Enter the date the SNC violation was first identified and place an "X" in the appropriate column. In the event that there were multiple SNC violations for a single well, enter each violation and the date it was identified on a separate line.

Section VI - Summary of Enforcement

Enter the date an enforcement action was taken against the SNC violation and place an "X" in the appropriate column. In the event that there were multiple enforcement actions, enter each enforcement action and the date it was taken on a separate line.

Section VII – Date Compliance Achieved

Enter the date compliance is achieved for each violation.

Paperwork Reduction Act

The public reporting and record keeping burden for this collection of information is estimated to average 2 hours per response. Burden means the total time, effort, or financial resource expended by persons to generate, maintain, retain, or disclose or provide information to or for a Federal Agency. This includes the time needed to review instructions; develop, acquire, install, and utilize technology and systems for the purposes of collecting, validating, and verifying information, processing and maintaining information, and disclosing and providing information; adjust the existing ways to comply with any previously applicable instructions and requirements; train personnel to be able to respond to the collection of information; search data sources; complete and review the collection of information; and, transmit or otherwise disclose the information. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. Send comments on the Agency's need for this information, the accuracy of the provided burden estimates, and any suggested methods for minimizing respondent burden, including the use of automated collection techniques to Director, Collection Strategies Division, U.S. Environmental Protection Agency (2822), 1200 Pennsylvania Ave., NW., Washington, DC 20460. Include the OMB control number in any correspondence. Do not send the completed forms to this address.